Journal of Nuclear Materials 185 (1991) 313–315
North-Holland

Author index

Anand, M.S. and B.M. Pande, Surface damage of V–Zr alloy by helium ions 185 (1991) 273
Arai, Y., C. Sari and J.C. Spirlet, Investigation of the reaction $UO_{2+x} + NpO_2 + C + N_2$ by thermogravimetry 185 (1991) 159

Bakai, A.S., O.V. Borodin, V.V. Bryk, V.N. Voyevodin, V.F. Zelenskij, I.M. Neklyudov, P.V. Platonov and A.A. Turkin, On the effect of radiation-induced segregation on void shape and growth rate 185 (1991) 260
Bhanumurthy, K., G.B. Kale and S.K. Khera, Reaction diffusion in the zirconium–iron system 185 (1991) 208
Boerman, D., see Piatti, G. 185 (1991) 29
Boilot, J.P., see Smaihi, M. 185 (1991) 19
Boncoeur, M.J., see Smaihi, M. 185 (1991) 19
Booth, W.D., see Ordonez, C.A. 185 (1991) 130
Borodin, O.V., see Bakai, A.S. 185 (1991) 260
Bosch, P., see Jimenez-Becerril, J. 185 (1991) 304
Botter, F., see Smaihi, M. 185 (1991) 19
Bryk, V.V., see Bakai, A.S. 185 (1991) 260
Bulbulian, S., see Jimenez-Becerril, J. 185 (1991) 304
Buzhinskij, O.I., Yu.S. Virgiliev and E.I. Kurolenkin, Post-irradiation strength of carbon candidate constructional materials for fusion reactors 185 (1991) 78

Carrera, R., see Ordonez, C.A. 185 (1991) 130
Clinard, Jr., F.W., E.M. Foltyn and R.C. Ewing, Stored energy in natural zirconolite and its synthetic counterpart after alpha recoil self-irradiation damage 185 (1991) 202

Dehadraya, J.V., see Mukerjee, S.K. 185 (1991) 39
Denis, A. and E.A. García, Simulation with the HITO code of the interaction of Zircaloy with uranium dioxide and steam at high temperatures 185 (1991) 96
Dimitrov, O., see Viltange, M. 185 (1991) 50

Ewing, R.C., see Clinard, Jr., F.W. 185 (1991) 202
Ewing, R.C., see Janeczek, J. 185 (1991) 66

Farvaque-Béra, A.M. and S. Leistikow, Electrochemical studies of the corrosion behavior of a low-carbon steel in aqueous chloride solutions simulating accident conditions of radioactive waste disposal 185 (1991) 1

Florido, P.C., V.H. Gillette and J.R. Granada, Thermal neutron cross sections and diffusion parameters of diphenyl and Dowtherm-A using a synthetic scattering function 185 (1991) 114
Foltyn, E.M., see Clinard, Jr., F.W. 185 (1991) 202
Forlerer de Svarch, E. and C. Rodríguez, On the influence of iron on the Zr-α(hcp) self-diffusion 185 (1991) 167

García, E.A., see Denis, A. 185 (1991) 96
Gillette, V.H., see Florido, P.C. 185 (1991) 114
Gorodetsky, A.E., see Kuzminov, D.B. 185 (1991) 123
Granada, J.R., see Florido, P.C. 185 (1991) 114
Griffiths, T.R. and H.V.St.A. Hubbard, Absorption spectrum of single-crystal UO_2: Identification of and effect of temperature on the peak positions of essentially all optical transitions in the visible to near infrared regions using derivative spectroscopy 185 (1991) 243

Hijikata, T., see Sakata, M. 185 (1991) 56
Holt, R.A., see King, A.D. 185 (1991) 174
Hood, G.M., see King, A.D. 185 (1991) 174
Hubbard, H.V.S.A., see Griffiths, T.R. 185 (1991) 243

Ibrahim, E.F., Neutron irradiation of Nitinol memory alloy 185 (1991) 302
Imoto, S., see Tanabe, T. 185 (1991) 286
Inoue, T., see Sakata, M. 185 (1991) 56

Janeczek, J. and R.C. Ewing, X-ray powder diffraction study of annealed uraninite 185 (1991) 66
Jimenez-Becerril, J., P. Bosch and S. Bulbulian, Synthesis and characterization of γ-$LiAlO_2$ 185 (1991) 304
Jung, P. and H. Schroeder, Thermal desorption of helium from homogeneously implanted graphite 185 (1991) 149

Kale, G.B., see Bhanumurthy, K. 185 (1991) 208
Kanashenko, S.L., see Kuzminov, D.B. 185 (1991) 123
Khera, S.K., see Bhanumurthy, K. 185 (1991) 208
Kim, I.S., see Yoo, J.S. 185 (1991) 87
King, A.D., G.M. Hood and R.A. Holt, Fe-enhancement of self-diffusion in α-Zr 185 (1991) 174
Kurata, M., see Sakata, M. 185 (1991) 56

Kurauchi, N., see Watanabe, K. 185 (1991) 8
Kurolenkin, E.I., see Buzhinskij, O.I. 185 (1991) 78
Kuzminov, D.B., S.L. Kanashenko, A.E. Gorodetsky and A.P. Zakharov, Interaction of deuterium atoms with radiation defects in graphite 185 (1991) 123

Lee, M.-C. and C.-J. Wu, Conversion of UF_6 to UO_2: A quasi-optimization of the ammonium uranyl carbonate process 185 (1991) 190
Leistikow, S., see Farvaque-Béra, A.M. 185 (1991) 1
Lucuta, P.G., see Matzke, Hj. 185 (1991) 292

Majumdar, S., see Raghunath, B. 185 (1991) 299
Mathews, M.D., see Momin, A.C. 185 (1991) 308
Matzke, Hj., P.G. Lucuta and R.A. Verrall, Formation and behaviour of barium silicate in UO_2-based SIMFUEL 185 (1991) 292
Minato, K., Thermodynamic analysis of cesium and iodine behavior in severe light water reactor accidents 185 (1991) 154
Mirza, E.B., see Momin, A.C. 185 (1991) 308
Momin, A.C., E.B. Mirza and M.D. Mathews, High temperature X-ray diffractometric studies on the lattice thermal expansion behaviour of UO_2, ThO_2 and $(U_{0.2}Th_{0.8})O_2$ doped with fission product oxides 185 (1991) 308
Mougin, J., see Smaihi, M. 185 (1991) 19
Mukerjee, S.K., J.V. Dehadraya, V.N. Vaidya and D.D. Sood, Kinetics of the carbothermic synthesis of uranium mononitride microspheres 185 (1991) 39
Mukerjee, S.K., see Rama Rao, G.A. 185 (1991) 231
Mulford, R.N.R., see Sheldon, R.I. 185 (1991) 297

Nakajima, H., see Watanabe, K. 185 (1991) 8
Nakanishi, T., see Watanabe, K. 185 (1991) 8
Neklyudov, I.M., see Bakai, A.S. 185 (1991) 260

Oakes, M.E., see Ordonez, C.A. 185 (1991) 130
Ordonez, C.A., W.D. Booth, R. Carrera and M.E. Oakes, Calculations of plasma sputtering including the effect of the surface floating potential 185 (1991) 130

Pande, B.M., see Anand, M.S. 185 (1991) 273
Paraschiv, A., see Paraschiv, M. 185 (1991) 182
Paraschiv, M. and A. Paraschiv, A simple method to evaluate the fission gas release at fuel grain boundary including the grain growth both at constant and at transient power histories 185 (1991) 182
Piatti, G. and D. Boerman, Hot tensile characteristics and microstructure of a Cu–0.65Cr–0.08Zr alloy for fusion reactor applications 185 (1991) 29
Platonov, P.V., see Bakai, A.S. 185 (1991) 260

Raghunath, B., R. Ramachandran and S. Majumdar, Particle size distribution of UO_2 aerosols 185 (1991) 299
Ramachandran, R., see Raghunath, B. 185 (1991) 299
Rama Rao, G.A., S.K. Mukerjee, V.N. Vaidya, V. Venugopal and D.D. Sood, Oxidation and hydrolysis kinetic studies on UN 185 (1991) 231
Rodríguez, C., see Forlerer de Svarch, E. 185 (1991) 167

Sahira, K., see Watanabe, K. 185 (1991) 8
Saitoh, T., see Watanabe, K. 185 (1991) 8
Sakata, M., M. Kurata, T. Hijikata and T. Inoue, Equilibrium distribution of rare earth elements between molten KCl–LiCl eutectic salt and liquid cadmium 185 (1991) 56
Sarce, A., Stability of precipitates in the anisotropic α-Zr matrix under irradiation 185 (1991) 214
Sari, C., see Arai, Y. 185 (1991) 159
Schroeder, H., see Jung, P. 185 (1991) 149
Sheldon, R.I. and R.N.R. Mulford, Correction to the uranium equation of state 185 (1991) 297
Singh, J., see Tiwari, G.P. 185 (1991) 224
Smaihi, M., J.P. Boilot, F. Botter, J. Mougin and M.J. Boncoeur, Out-of-pile tritium extraction from lithium orthosilicate-based ceramics 185 (1991) 19
Sood, D.D., see Mukerjee, S.K. 185 (1991) 39
Sood, D.D., see Rama Rao, G.A. 185 (1991) 231
Spirlet, J.C., see Arai, Y. 185 (1991) 159

Takatsu, T., see Watanabe, K. 185 (1991) 8
Takeiri, T., see Watanabe, K. 185 (1991) 8
Takeo, M., see Tanabe, T. 185 (1991) 286
Tanabe, T., M. Takeo and S. Imoto, Effect of surface oxygen on reemission of deuterium implanted in nickel 185 (1991) 286
Tiwari, G.P. and J. Singh, Effect of the proximity of the external surface on the growth characteristics of inert gas bubbles 185 (1991) 224
Trushin, Yu.V., Point-defect flow and radiation swelling in a biphase material 185 (1991) 268
Trushin, Yu.V., Theory of radiation processes in decomposed solid solutions 185 (1991) 279
Turkin, A.A., see Bakai, A.S. 185 (1991) 260

Vaidya, V.N., see Mukerjee, S.K. 185 (1991) 39
Vaidya, V.N., see Rama Rao, G.A. 185 (1991) 231
Venugopal, V., see Rama Rao, G.A. 185 (1991) 231
Verrall, R.A., see Matzke, Hj. 185 (1991) 292

Viltange, M. et O. Dimitrov, Variation de l'ordre local au cours du laminage d'un alliage $Fe_{39}Cr_{16}Ni_{45}$ 185 (1991) 50
Virgiliev, Yu.S., see Buzhinskij, O.I. 185 (1991) 78
Voyevodin, V.N., see Bakai, A.S. 185 (1991) 260

Watanabe, K., H. Nakajima, K. Sahira, N. Kurauchi, T. Takeiri, T. Saitoh, T. Takatsu and T. Nakanishi, Development of a filler metal for Hastelloy alloy XR weldment 185 (1991) 8
Wu, C.-J., see Lee, M.-C. 185 (1991) 190

Yoo, J.S. and I.S. Kim, Effect of $(\alpha + \beta)$ heat treatment on the mechanical properties of Zircaloy-4 185 (1991) 87

Zakharov, A.P., see Kuzminov, D.B. 185 (1991) 123
Zelenskij, V.F., see Bakai, A.S. 185 (1991) 260

Journal of Nuclear Materials 185 (1991) 317–321
North-Holland

Subject index

Actinides *(excl. Th, U, Pu)*
Equilibrium distribution of rare earth elements between molten KCl–LiCl eutectic salt and liquid cadmium, M. Sakata, M. Kurata, T. Hijikata and T. Inoue 185 (1991) 56
Investigation of the reaction $UO_{2+x} + NpO_2 + C + N_2$ by thermogravimetry, Y. Arai, C. Sari and J.C. Spirlet 185 (1991) 159

Alloys *("Various", i.e. not listed elsewhere by name)*
Point-defect flow and radiation swelling in a biphase material, Yu.V. Trushin 185 (1991) 268

Blanket Materials
Out-of-pile tritium extraction from lithium orthosilicate-based ceramics, M. Smaihi, J.P. Boilot, F. Botter, J. Mougin and M.J. Boncoeur 185 (1991) 19
Synthesis and characterization of γ-$LiAlO_2$, J. Jimenez-Becerril, P. Bosch and S. Bulbulian 185 (1991) 304

Ceramics *("Various", i.e. not listed elsewhere by name)*
Out-of-pile tritium extraction from lithium orthosilicate-based ceramics, M. Smaihi, J.P. Boilot, F. Botter, J. Mougin and M.J. Boncoeur 185 (1991) 19
Synthesis and characterization of γ-$LiAlO_2$, J. Jimenez-Becerril, P. Bosch and S. Bulbulian 185 (1991) 304

Cladding Materials
Effect of $(\alpha + \beta)$ heat treatment on the mechanical properties of Zircaloy-4, J.S. Yoo and I.S. Kim 185 (1991) 87

Compatibility and Corrosion
Electrochemical studies of the corrosion behavior of a low-carbon steel in aqueous chloride solutions simulating accident conditions of radioactive waste disposal, A.M. Farvaque-Béra and S. Leistikow 185 (1991) 1
Simulation with the HITO code of the interaction of Zircaloy with uranium dioxide and steam at high temperatures, A. Denis and E.A. García 185 (1991) 96

Computer Calculations, including Modelling
Simulation with the HITO code of the interaction of Zircaloy with uranium dioxide and steam at high temperatures, A. Denis and E.A. García 185 (1991) 96
Calculations of plasma sputtering including the effect of the surface floating potential, C.A. Ordonez, W.D. Booth, R. Carrera and M.E. Oakes 185 (1991) 130
Thermodynamic analysis of cesium and iodine behavior in severe light water reactor accidents, K. Minato 185 (1991) 154
Point-defect flow and radiation swelling in a biphase material, Yu.V. Trushin 185 (1991) 268
Theory of radiation processes in decomposed solid solutions, Yu.V. Trushin 185 (1991) 279

Copper and Copper Alloys
Hot tensile characteristics and microstructure of a Cu–0.65Cr–0.08Zr alloy for fusion reactor applications, G. Piatti and D. Boerman 185 (1991) 29

Crystallographic Properties
X-ray powder diffraction study of annealed uraninite, J. Janeczek and R.C. Ewing 185 (1991) 66
Stability of precipitates in the anisotropic α-Zr matrix under irradiation, A. Sarce 185 (1991) 214
High temperature X-ray diffractometric studies on the lattice thermal expansion behaviour of UO_2, ThO_2 and $(U_{0.2}Th_{0.8})O_2$ doped with fission product oxides, A.C. Momin, E.B. Mirza and M.D. Mathews 185 (1991) 308

Defects and Defect Structures
Variation de l'ordre local au cours du laminage d'un alliage $Fe_{39}Cr_{16}Ni_{45}$, M. Viltange et O. Dimitrov 185 (1991) 50
On the effect of radiation-induced segregation on void shape and growth rate, A.S. Bakai, O.V. Borodin, V.V. Bryk, V.N. Voyevodin, V.F. Zelenskij, I.M. Neklyudov, P.V. Platonov and A.A. Turkin 185 (1991) 260

Diffusion *(incl. Thermodiffusion)*
Thermal desorption of helium from homogeneously implanted graphite, P. Jung and H. Schroeder 185 (1991) 149

On the influence of iron on the Zr-α(hcp) self-diffusion, E. Forlerer de Svarch and C. Rodríguez 185 (1991) 167
Fe-enhancement of self-diffusion in α-Zr, A.D. King, G.M. Hood and R.A. Holt 185 (1991) 174
Reaction diffusion in the zirconium–iron system, K. Bhanumurthy, G.B. Kale and S.K. Khera 185 (1991) 208
Stability of precipitates in the anisotropic α-Zr matrix under irradiation, A. Sarce 185 (1991) 214

Divertor
Hot tensile characteristics and microstructure of a Cu–0.65Cr–0.08Zr alloy for fusion reactor applications, G. Piatti and D. Boerman 185 (1991) 29

Electrical Properties
Variation de l'ordre local au cours du laminage d'un alliage $Fe_{39}Cr_{16}Ni_{45}$, M. Viltange et O. Dimitrov 185 (1991) 50

Experimental Techniques
Correction to the uranium equation of state, R.I. Sheldon and R.N.R. Mulford 185 (1991) 297

Fabrication
Development of a filler metal for Hastelloy alloy XR weldment, K. Watanabe, H. Nakajima, K. Sahira, N. Kurauchi, T. Takeiri, T. Saitoh, T. Takatsu and T. Nakanishi 185 (1991) 8

Fission Products
Equilibrium distribution of rare earth elements between molten KCl–LiCl eutectic salt and liquid cadmium, M. Sakata, M. Kurata, T. Hijikata and T. Inoue 185 (1991) 56
A simple method to evaluate the fission gas release at fuel grain boundary including the grain growth both at constant and at transient power histories, M. Paraschiv and A. Paraschiv 185 (1991) 182

Fuels and Fuel Elements
Kinetics of the carbothermic synthesis of uranium mononitride microspheres, S.K. Mukerjee, J.V. Dehadraya, V.N. Vaidya and D.D. Sood 185 (1991) 39
X-ray powder diffraction study of annealed uraninite, J. Janeczek and R.C. Ewing 185 (1991) 66
Simulation with the HITO code of the interaction of Zircaloy with uranium dioxide and steam at high temperatures, A. Denis and E.A. García 185 (1991) 96
Thermodynamic analysis of cesium and iodine behavior in severe light water reactor accidents, K. Minato 185 (1991) 154
A simple method to evaluate the fission gas release at fuel grain boundary including the grain growth both at constant and at transient power histories, M. Paraschiv and A. Paraschiv 185 (1991) 182
Oxidation and hydrolysis kinetic studies on UN, G.A. Rama Rao, S.K. Mukerjee, V.N. Vaidya, V. Venugopal and D.D. Sood 185 (1991) 231
Formation and behaviour of barium silicate in UO_2-based SIMFUEL (Letter to the Editors), Hj. Matzke, P.G. Lucuta and R.A. Verrall 185 (1991) 292

Fusion Reactors
Hot tensile characteristics and microstructure of a Cu–0.65Cr–0.08Zr alloy for fusion reactor applications, G. Piatti and D. Boerman 185 (1991) 29
Post-irradiation strength of carbon candidate constructional materials for fusion reactors, O.I. Buzhinskij, Yu.S. Virgiliev and E.I. Kurolenkin 185 (1991) 78
Calculations of plasma sputtering including the effect of the surface floating potential, C.A. Ordonez, W.D. Booth, R. Carrera and M.E. Oakes 185 (1991) 130

Gases *(excl. Tritium)* in Metals, Alloys and Ceramics
Effect of the proximity of the external surface on the growth characteristics of inert gas bubbles, G.P. Tiwari and J. Singh 185 (1991) 224
Formation and behaviour of barium silicate in UO_2-based SIMFUEL, Hj. Matzke, P.G. Lucuta and R.A. Verrall 185 (1991) 292

Graphite and Carbon
Post-irradiation strength of carbon candidate constructional materials for fusion reactors, O.I. Buzhinskij, Yu.S. Virgiliev and E.I. Kurolenkin 185 (1991) 78
Interaction of deuterium atoms with radiation defects in graphite, D.B. Kuzminov, S.L. Kanashenko, A.E. Gorodetsky and A.P. Zakharov 185 (1991) 123
Thermal desorption of helium from homogeneously implanted graphite, P. Jung and H. Schroeder 185 (1991) 149

Helium
Thermal desorption of helium from homogeneously implanted graphite, P. Jung and H. Schroeder 185 (1991) 149

Effect of the proximity of the external surface on the growth characteristics of inert gas bubbles, G.P. Tiwari and J. Singh 185 (1991) 224
Surface damage of V–Zr alloy by helium ions, M.S. Anand and B.M. Pande 185 (1991) 273

High-Temperature Reactors
Development of a filler metal for Hastelloy alloy XR weldment, K. Watanabe, H. Nakajima, K. Sahira, N. Kurauchi, T. Takeiri, T. Saitoh, T. Takatsu and T. Nakanishi 185 (1991) 8

Hydrogen and Hydrides *(incl. Deuterium and Deuterides)*
Effect of surface oxygen on reemission of deuterium implanted in nickel, T. Tanabe, M. Takeo and S. Imoto 185 (1991) 286

Iron and Iron Alloys *(excl. Steels)*
On the influence of iron on the Zr-α(hcp) self-diffusion, E. Forlerer de Svarch and C. Rodríguez 185 (1991) 167
Reaction diffusion in the zirconium–iron system, K. Bhanumurthy, G.B. Kale and S.K. Khera 185 (1991) 208

Irradiation Effects *(excl. Swelling and Voids)*
Post-irradiation strength of carbon candidate constructional materials for fusion reactors, O.I. Buzhinskij, Yu.S. Virgiliev and E.I. Kurolenkin 185 (1991) 78
Interaction of deuterium atoms with radiation defects in graphite, D.B. Kuzminov, S.L. Kanashenko, A.E. Gorodetsky and A.P. Zakharov 185 (1991) 123
Stored energy in natural zirconolite and its synthetic counterpart after alpha recoil self-irradiation damage, F.W. Clinard, Jr., E.M. Foltyn and R.C. Ewing 185 (1991) 202
Theory of radiation processes in decomposed solid solutions, Yu.V. Trushin 185 (1991) 279

Kinetics
Thermal desorption of helium from homogeneously implanted graphite, P. Jung and H. Schroeder 185 (1991) 149
Investigation of the reaction $UO_{2+x} + NpO_2 + C + N_2$ by thermogravimetry, Y. Arai, C. Sari and J.C. Spirlet 185 (1991) 159
Point-defect flow and radiation swelling in a biphase material, Yu.V. Trushin 185 (1991) 268

Mechanical Properties *("Various", i.e. not listed elsewhere by name)*
Development of a filler metal for Hastelloy alloy XR weldment, K. Watanabe, H. Nakajima, K. Sahira, N. Kurauchi, T. Takeiri, T. Saitoh, T. Takatsu and T. Nakanishi 185 (1991) 8
Hot tensile characteristics and microstructure of a Cu–0.65Cr–0.08Zr alloy for fusion reactor applications, G. Piatti and D. Boerman 185 (1991) 29
Post-irradiation strength of carbon candidate constructional materials for fusion reactors, O.I. Buzhinskij, Yu.S. Virgiliev and E.I. Kurolenkin 185 (1991) 78
Effect of (α + β) heat treatment on the mechanical properties of Zircaloy-4, J.S. Yoo and I.S. Kim 185 (1991) 87
Neutron irradiation of Nitinol memory alloy, E.F. Ibrahim 185 (1991) 302

Microstructure *(incl. Textures)*
Hot tensile characteristics and microstructure of a Cu–0.65Cr–0.08Zr alloy for fusion reactor applications, G. Piatti and D. Boerman 185 (1991) 29
Point-defect flow and radiation swelling in a biphase material, Yu.V. Trushin 185 (1991) 268

Moderator and Reflector Materials
Thermal neutron cross sections and diffusion parameters of diphenyl and Dowtherm-A using a synthetic scattering function, P.C. Florido, V.H. Gillette and J.R. Granada 185 (1991) 114

Nickel and Nickel Alloys
Development of a filler metal for Hastelloy alloy XR weldment, K. Watanabe, H. Nakajima, K. Sahira, N. Kurauchi, T. Takeiri, T. Saitoh, T. Takatsu and T. Nakanishi 185 (1991) 8
Effect of surface oxygen on reemission of deuterium implanted in nickel, T. Tanabe, M. Takeo and S. Imoto 185 (1991) 286
Neutron irradiation of Nitinol memory alloy, E.F. Ibrahim 185 (1991) 302

Nuclear Properties
Thermal neutron cross sections and diffusion parameters of diphenyl and Dowtherm-A using a synthetic scattering function, P.C. Florido, V.H. Gillette and J.R. Granada 185 (1991) 114

Phase Transformation
Effect of (α + β) heat treatment on the mechanical properties of Zircaloy-4, J.S. Yoo and I.S. Kim 185 (1991) 87
Theory of radiation processes in decomposed solid solutions, Yu.V. Trushin 185 (1991) 279

Physical Properties *("Various", i.e. not listed elsewhere by name)*
Post-irradiation strength of carbon candidate constructional materials for fusion reactors, O.I. Buzhinskij, Yu.S. Virgiliev and E.I. Kurolenkin 185 (1991) 78
Absorption spectrum of single-crystal UO_2: Identification of and effect of temperature on the peak positions of essentially all optical transitions in the visible to near infrared regions using derivative spectroscopy, T.R. Griffiths and H.V.St.A. Hubbard 185 (1991) 243
Particle size distribution of UO_2 aerosols, B. Raghunath, R. Ramachandran and S. Majumdar 185 (1991) 299

Plutonium, Plutonium Alloys and Compounds
Stored energy in natural zirconolite and its synthetic counterpart after alpha recoil self-irradiation damage, F.W. Clinard, Jr., E.M. Foltyn and R.C. Ewing 185 (1991) 202

Powder Processes and Products
Kinetics of the carbothermic synthesis of uranium mononitride microspheres, S.K. Mukerjee, J.V. Dehadraya, V.N. Vaidya and D.D. Sood 185 (1991) 39
Conversion of UF_6 to UO_2: A quasi-optimization of the ammonium uranyl carbonate process, M.-C. Lee and C.-J. Wu 185 (1991) 190

Reprocessing
Equilibrium distribution of rare earth elements between molten KCl–LiCl eutectic salt and liquid cadmium, M. Sakata, M. Kurata, T. Hijikata and T. Inoue 185 (1991) 56

Safety of Nuclear Reactors
Thermodynamic analysis of cesium and iodine behavior in severe light water reactor accidents, K. Minato 185 (1991) 154

Steels
Electrochemical studies of the corrosion behavior of a low-carbon steel in aqueous chloride solutions simulating accident conditions of radioactive waste disposal, A.M. Farvaque-Béra and S. Leistikow 185 (1991) 1
Variation de l'ordre local au cours du laminage d'un alliage $Fe_{39}Cr_{16}Ni_{45}$, M. Viltange et O. Dimitrov 185 (1991) 50

Structural Materials
Development of a filler metal for Hastelloy alloy XR weldment, K. Watanabe, H. Nakajima, K. Sahira, N. Kurauchi, T. Takeiri, T. Saitoh, T. Takatsu and T. Nakanishi 185 (1991) 8

Surface Effects and Characterization Techniques
Electrochemical studies of the corrosion behavior of a low-carbon steel in aqueous chloride solutions simulating accident conditions of radioactive waste disposal, A.M. Farvaque-Béra and S. Leistikow 185 (1991) 1
Calculations of plasma sputtering including the effect of the surface floating potential, C.A. Ordonez, W.D. Booth, R. Carrera and M.E. Oakes 185 (1991) 130
Effect of surface oxygen on reemission of deuterium implanted in nickel, T. Tanabe, M. Takeo and S. Imoto 185 (1991) 286

Swelling
On the effect of radiation-induced segregation on void shape and growth rate, A.S. Bakai, O.V. Borodin, V.V. Bryk, V.N. Voyevodin, V.F. Zelenskij, I.M. Neklyudov, P.V. Platonov and A.A. Turkin 185 (1991) 260
Point-defect flow and radiation swelling in a biphase material, Yu.V. Trushin 185 (1991) 268
Theory of radiation processes in decomposed solid solutions, Yu.V. Trushin 185 (1991) 279

Thermal Reactors
Simulation with the HITO code of the interaction of Zircaloy with uranium dioxide and steam at high temperatures, A. Denis and E.A. García 185 (1991) 96
Thermal neutron cross sections and diffusion parameters of diphenyl and Dowtherm-A using a synthetic scattering function, P.C. Florido, V.H. Gillette and J.R. Granada 185 (1991) 114
Thermodynamic analysis of cesium and iodine behavior in severe light water reactor accidents, K. Minato 185 (1991) 154
Formation and behaviour of barium silicate in UO_2-based SIMFUEL (Letter to the Editors), Hj. Matzke, P.G. Lucuta and R.A. Verrall 185 (1991) 292

Thermodynamic Properties
Thermodynamic analysis of cesium and iodine behavior in severe light water reactor accidents, K. Minato 185 (1991) 154
Correction to the uranium equation of state, R.I. Sheldon and R.N.R. Mulford 185 (1991) 297

Thermophysical Properties
Oxidation and hydrolysis kinetic studies on UN, G.A. Rama Rao, S.K. Mukerjee, V.N. Vaidya, V. Venugopal and D.D. Sood 185 (1991) 231

Thorium, Thorium Alloys and Compounds
High temperature X-ray diffractometric studies on the lattice thermal expansion behaviour of UO_2, ThO_2 and $(U_{0.2}Th_{0.8})O_2$ doped with fission product oxides, A.C. Momin, E.B. Mirza and M.D. Mathews 185 (1991) 308

Titanium, Titanium Alloys and Compounds
Neutron irradiation of Nitinol memory alloy, E.F. Ibrahim 185 (1991) 302

Tritium
Out-of-pile tritium extraction from lithium orthosilicate-based ceramics, M. Smaihi, J.P. Boilot, F. Botter, J. Mougin and M.J. Boncoeur 185 (1991) 19
Synthesis and characterization of γ-$LiAlO_2$, J. Jimenez-Becerril, P. Bosch and S. Bulbulian 185 (1991) 304

Uranium and Uranium Alloys
Conversion of UF_6 to UO_2: A quasi-optimization of the ammonium uranyl carbonate process, M.-C. Lee and C.-J. Wu 185 (1991) 190
Correction to the uranium equation of state, R.I. Sheldon and R.N.R. Mulford 185 (1991) 297

Uranium Ceramics
Kinetics of the carbothermic synthesis of uranium mononitride microspheres, S.K. Mukerjee, J.V. Dehadraya, V.N. Vaidya and D.D. Sood 185 (1991) 39
X-ray powder diffraction study of annealed uraninite, J. Janeczek and R.C. Ewing 185 (1991) 66
Simulation with the HITO code of the interaction of Zircaloy with uranium dioxide and steam at high temperatures, A. Denis and E.A. García 185 (1991) 96
Investigation of the reaction $UO_{2+x} + NpO_2 + C + N_2$ by thermogravimetry, Y. Arai, C. Sari and J.C. Spirlet 185 (1991) 159
Oxidation and hydrolysis kinetic studies on UN, G.A. Rama Rao, S.K. Mukerjee, V.N. Vaidya, V. Venugopal and D.D. Sood 185 (1991) 231
Absorption spectrum of single-crystal UO_2: Identification of and effect of temperature on the peak positions of essentially all optical transitions in the visible to near infrared regions using derivative spectroscopy, T.R. Griffiths and H.V.St.A. Hubbard 185 (1991) 243
Formation and behaviour of barium silicate in UO_2-based SIMFUEL, Hj. Matzke, P.G. Lucuta and R.A. Verrall 185 (1991) 292
Particle size distribution of UO_2 aerosols, B. Raghunath, R. Ramachandran and S. Majumdar 185 (1991) 299
High temperature X-ray diffractometric studies on the lattice thermal expansion behaviour of UO_2, ThO_2 and $(U_{0.2}Th_{0.8})O_2$ doped with fission product oxides, A.C. Momin, E.B. Mirza and M.D. Mathews 185 (1991) 308

Vanadium and Vanadium Alloys
Surface damage of V–Zr alloy by helium ions, M.S. Anand and B.M. Pande 185 (1991) 273

Wastes *(radioactive)*
Electrochemical studies of the corrosion behavior of a low-carbon steel in aqueous chloride solutions simulating accident conditions of radioactive waste disposal, A.M. Farvaque-Béra and S. Leistikow 185 (1991) 1
Equilibrium distribution of rare earth elements between molten KCl–LiCl eutectic salt and liquid cadmium, M. Sakata, M. Kurata, T. Hijikata and T. Inoue 185 (1991) 56
Stored energy in natural zirconolite and its synthetic counterpart after alpha recoil self-irradiation damage, F.W. Clinard, Jr., E.M. Foltyn and R.C. Ewing 185 (1991) 202

Zirconium, Zirconium Alloys and Compounds
Effect of (α + β) heat treatment on the mechanical properties of Zircaloy-4, J.S. Yoo and I.S. Kim 185 (1991) 87
Simulation with the HITO code of the interaction of Zircaloy with uranium dioxide and steam at high temperatures, A. Denis and E.A. García 185 (1991) 96
On the influence of iron on the Zr-α(hcp) self-diffusion, E. Forlerer de Svarch and C. Rodríguez 185 (1991) 167
Fe-enhancement of self-diffusion in α-Zr, A.D. King, G.M. Hood and R.A. Holt 185 (1991) 174
Reaction diffusion in the zirconium–iron system, K. Bhanumurthy, G.B. Kale and S.K. Khera 185 (1991) 208
Stability of precipitates in the anisotropic α-Zr matrix under irradiation, A. Sarce' 185 (1991) 214
Surface damage of V–Zr alloy by helium ions, M.S. Anand and B.M. Pande 185 (1991) 273